## Summary of Statement to the Disposal Subcommittee of the Blue Ribbon Commission on America's Nuclear Future Jonathan Edwards, Director EPA Radiation Protection Division September 1, 2010

EPA's overall authorities for establishing radiation protection standards

- Atomic Energy Act authority for "establishing generally applicable standards for the protection of the general environment from radioactive material." (Section 2(a)(6))
  - Applies "outside the boundaries of locations under the control of persons possessing or using radioactive material."
  - o Implementation and enforcement typically fall to NRC or DOE

Nuclear Waste Policy Act of 1982 directed EPA to "promulgate generally applicable standards for protection of the general environment from offsite releases from radioactive material in repositories." (Section 121)

- 40 CFR part 191 proposed in 1982, final in 1985
- Court of Appeals for the First Circuit remanded portions in 1987

## WIPP Land Withdrawal Act of 1992

- Reinstated 40 CFR part 191 (except for remanded portions)
- Directed EPA to issue final disposal regulations
- Exempted the proposed repository at Yucca Mountain from the final disposal regulations

Energy Policy Act of 1992 directed EPA to establish public health and safety standards applicable to the Yucca Mountain repository.

- "prescribe the maximum annual effective dose equivalent to individual members of the public." (Section 801(a)(1))
- Contract with the National Academy of Sciences for a study
- Standards "based upon and consistent with the findings and recommendations of" NAS
- 40 CFR part 197 issued in 2001.

2004 ruling of Court of Appeals for D.C Circuit vacated one portion of EPA's rule

- Compliance period not "based upon and consistent with" NAS recommendation
- NAS recommended compliance standard at time of peak risk
  - o long-term stability of Yucca Mountain on the order of 1 million years
  - o feasible to project future exposures for compliance purposes
- EPA set a 10,000-year compliance period based on uncertainty in projections
- Required DOE place peak projections in EIS

EPA amended 40 CFR part 197 in 2008 to address long-term uncertainty

- Retain existing compliance limit for the first 10,000 years
- Separate compliance limit beyond that time and up to 1 million years
- Revised standards challenged (stayed pending resolution of license application status)